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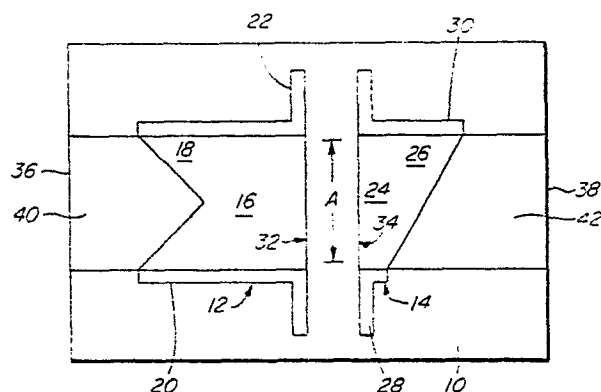
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16.12.87 Bulletin 87/51(71) Applicant: **NORTHERN TELECOM LIMITED**
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London WC1V 7LE(GB)(54) **Saw devices with reflection-suppressing fingers.**

(57) Each IDT (inter-digital transducer) (12, 14) of a SAW (surface acoustic wave) device has a linearly tapered back edge formed by reflection-suppressing fingers (18, 26) of successively decreasing length spaced apart with a pitch of $\lambda/4$ behind the active region (16, 24) of the IDT, where λ is the wavelength of a SAW to be propagated, whereby SAW reflections at the back edge of the IDT are substantially eliminated. A thin resistive doped silicon film (40, 42) between the back edge of each IDT and the adjacent edge (36, 38) of the substrate absorbs waves propagated via this back edge. The film underlies the IDTs to provide improved adhesion to the substrate.

**FIG. 1****EP 0 197 640 A3**



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	US-A-4 350 963 (H. IWAMOTO) * Figures 5,10; column 3, line 57 - column 4, line 8; column 5, line 4 * -----	1,3	H 03 H 9/02
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			H 03 H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 30-09-1987	Examiner DECONINCK E.F.V.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

